

AMENDMENT

A marked up version of the application showing the amendments is attached hereto as Exhibit A. Matter that has been deleted is indicated by brackets and matter that has been added is indicated by underlining. Please amend the application as follows:

IN THE CLAIMS:

Please cancel claim 7, without prejudice.

Please amend claims 1, 8, 11-12, 20-21, 27, 35, 42-43 and 45-46 as follows:

1. (Twice Amended) A method of preparing a composition comprising a mixture of cells derived from human liver tissue, which mixture comprises an enriched population of human liver progenitors, the method comprising:

- C1
- (a) providing a cell suspension of human liver tissue comprising a mixture of cells of varying sizes, including immature cells and mature cells; and
 - (b) debulking the suspension based on cell size, buoyant density, or a combination thereof to remove mature cells, while retaining immature cells,

to provide a mixture of cells comprised of an enriched population of human liver progenitors.

7. (Canceled)

C2

8. (Amended) The method of claim 1 in which the debulking step comprises centrifugal elutriation, density gradient centrifugation, countercurrent fluid flow, continuous-flow centrifugation, zonal centrifugation, or combinations thereof.

11. (Amended) A human hepatic pluripotent progenitor isolated by the method of claim 1.

C3

12. (Twice Amended) A method of preparing a composition comprising an enriched population of human hepatic progenitors comprising:

- C3
CDN't.
- (a) providing a cell suspension of human liver tissue,
 - (b) debulking the suspension based on cell size, buoyant density, or a combination thereof to remove mature cells, and
 - (c) subjecting the debulked suspension to a positive or negative immunoselection, such that a mixture of cells is provided, which mixture of cells is comprised of an enriched population of human liver progenitors, which human liver progenitors themselves, their progeny, or more mature forms thereof exhibit one or more markers indicative of expression of alpha-fetoprotein, albumin, or both.
-

C4

20. (Amended) A human hepatic pluripotent progenitor isolated by the method of claim 14.

C5

21. (Twice Amended) A composition comprising an enriched population of human hepatic pluripotent progenitors, their progeny, or more mature forms thereof, which exhibit one or more markers indicative of expression of full-length alpha-fetoprotein, full-length albumin, or both.

C6

27. (Amended) A method of treating liver dysfunction or disease responsive to treatment with liver progenitors, comprising administering to a subject in need of such treatment an effective amount of human liver progenitors, their progeny, more mature forms thereof, or combinations thereof, in a pharmaceutically acceptable carrier and treating the liver dysfunction or disease.

C7

35. (Amended) A method of treating a disease comprising administering to a subject in need of such treatment an effective amount of human hepatic progenitors, their progeny, or more mature forms thereof in which the human hepatic progenitors, their progeny, or more mature forms harbor exogenous nucleic acid.

C8

42. (Twice Amended) Isolated human hepatic pluripotent progenitors, their progeny or more mature forms thereof which exhibit one or more markers indicative of expression of alpha-fetoprotein, albumin, or both.

C8
CDN+
43. (Twice Amended) Isolated human hepatic pluripotent progenitors, their progeny or more mature forms thereof which exhibit the phenotype glycophorin A⁻, CD45⁻, alpha-fetoprotein⁺⁺⁺, albumin⁺, and ICAM⁺.

C9
45. (Amended) The method of claim 1 in which the progenitors have a diameter between 5 and 15 microns.

46. (Amended) The method of claim 45 in which the progenitors have a diameter between 8 and 9.4 microns.

Please add new claims 47-48 as follows:

C10
47. (New) The method of claim 1 which further comprises selecting those cells which their progeny, or more mature forms thereof exhibit one or more markers indicative of expression of alpha-fetoprotein, albumin, or both.

48. (New) The method of claim 47 in which the selection step comprises panning, affinity chromatography, tagging with fluorescent labels, use of magnetic beads, or combinations thereof.

IN THE SEQUENCE LISTING:

Please replace the Sequence Listing as originally filed following the abstract with the substitute sheets of the Sequence Listing.